

***E. coli* Data for 2014 Integrated Report**

January 30, 2014 Meeting Summary

DEQ, WARD, WWC

- On January 30, 2014, stakeholders met with DEQ to discuss 18 stream segments that were being proposed as additions to Wyoming's 2014 303(d) List. These waters exceeded the pre-2013 *E. coli* criteria protective of primary contact recreation. The *E. coli* criteria were updated in 2013 and now have a 60-day geometric mean instead of a 30-day geometric mean.
- Stakeholders at the meeting included Michael Henn (State Lands Field Supervisor), Chris Wichmann (Natural Resources and Policy Manager, Wyoming Dept. of Agriculture), Nephi Cole (Governor's Policy Office), Bobbie Frank (Wyoming Association of Conservation Districts), Astrid Martinez (NRCS State Conservationist via Phone), David Waterstreet, Kevin Frederick, Lindsay Patterson
- DEQ outlined at the meeting that rather than add these waters to the 2014 303(d) List, the agency would place the waters in Category 3 of the Integrated Report. The indeterminate categorization will allow DEQ time to evaluate the water's designated use support using the new 60-day criteria and sampling requirements.
- All stakeholder groups seemed amenable to placing waters with insufficient *E. coli* data received for the 2014 Integrated Report (IR) in Category 3 due to changes to the criteria in Chapter 1 from a 30-day duration to 60-day duration, with the exception of all data collected by Western Watersheds Project (WWP).
- ⇒ • One set of WWP data were collected without authorization on State Land (see Topic 1, below) and five sets of WWP data that were potentially collected with "preconceived bias" (see Topic 2, below)
- Additional discussion focused on whether it is appropriate to use third party data for future designated use support determinations (see Topic 3, below).

Topic 1: Collection of Data Without Proper Authorization

- One set of WWP data that we were planning to place into Category 3 of the 2014 IR were collected on State Land without authorization. Authorization is required under State Lands Rules and Regulations, Chapter 16.
- DEQ currently does not have any guidance about this issue.
- It was suggested that to not be complicit in the activity, DEQ should probably not use these data for designated use support determinations.
- To address this problem in the future, we propose including the requirement to obtain proper permissions from the Land Management Agencies that have permission requirements (i.e., State Lands and National Park Service) and private land owners in Sampling and Analysis Plans.

?? and provide documented

Topic 2: Evaluating Whether Data Were Collected With "Preconceived Bias"

- Chapter 1, Section 35 outlines that data used for designated use support determinations will "Consist of data collection using accepted referenced laboratory and field methods employed by a person who has received specialized training and has field experience in developing a monitoring plan, a quality assurance plan, and employing the methods outlined in such plans or works under the supervision of a person who has these qualifications. Specialized training includes a thorough knowledge of written

sampling protocols and field methods such that data collection and interpretation are reproducible, scientifically defensible and free from preconceived bias;"

- During the January 30, 2014 meeting, Bobbie Frank raised some issues about WWP's 2013 data submission and whether the submission was "reproducible, scientifically defensible and free from preconceived bias" and requested that DEQ have the Attorney General's office review the submission against the language in Chapter 1, Section 35.
- WWP's data were found to be reproducible, scientifically defensible and free from preconceived bias during WDEQ's original QA/QC evaluation.
- We have since re-reviewed these materials and did not see any indication that the data were collected in a way that indicated preconceived bias; however, we agreed that it would be a good idea for the Attorney General's Office to resolve the interpretation of "preconceived bias."
- The WWP data submission did indicate with field notes and dated photographs that the source of the impairment at a given site was cattle grazing. Such documentation is often included with water quality data, as pollutant's source(s) are included in the 303(d) List when that information is available.
- Unless there is evidence to suggest otherwise, DEQ typically assumes that if the sampling entity had a pre-approved Sampling and Analysis Plan(SAP), that they followed the SAP when collecting the data, and the data met established quality assurance/quality control (QA/QC), that the data is consistent with Chapter 1, Section 35.
- If we do want to have the A.G. review the 2013 WWP submission, do we want to move forward with the 2014 IR? We can also continue to delay the 2014 IR until this question is resolved.

Topic 3: Requirements for Future Data Submissions (Exclude Third Party Data or Increase Rigor)

- Much discussion at the meeting focused on whether it is appropriate to use data collected by non-governmental agencies for use support determinations.
- To date, DEQ has followed the guidance in Chapter 1, Section 35 about credible data requirements and has only excluded data that do not meet these requirements.
- DEQ has not excluded data based on the agenda or status of an organization.
- For the 2010 IR, DEQ did not use Western Watersheds Projects data that did not meet QA/QC
- For the 2012 IR, WWP data met QA/QC and was used for three 303(d) Listings
- For the 2014 IR, WWP collected data at three streams in 2013 that did not meet the sample spacing requirements in the 2013 Assessment Methods; these data were immediately excluded from evaluation.
- Federal regulations (40 CFR 130.7(b)(5)) require that "Each State shall assemble and evaluate all existing and readily available water quality-related data and information to develop the [303(d) List]."
- 40 CFR 130.7(b)(5)(iii) also describes that the data that States evaluate should include, but is not limited to: "Waters for which water quality problems have been reported by local, state, or federal agencies; members of the public; or academic institutions. These groups should be actively solicited for research they may be conducting and reporting."
- The federal regulation language may make it difficult for DEQ to exclude data from non-governmental groups for use-support determinations.

- Utah indicated on 1/31/14 that they will be using data from Western Watersheds Projects for use support determinations and Colorado has a robust volunteer monitoring program that collects data for use support determinations.
- EPA has approval/disapproval authority over the 303(d) List and can place waters on a State's List that they believe do not support their designated uses.
- As a possible alternative to excluding third party data, DEQ can continue to require "credible data" as defined in the Environmental Quality Act and elaborated on in Chapter 1, Section 35. This will not address concerns over biased data or insufficient training that have been raised.
- We can add additional language in the Assessment Methodology outlining in more detail the requirements for groups that collect data specifically for use support determinations. ?? limits on the use of outside data?
- Examples include identifying the sample locations within the Sampling and Analysis Plan prior to initiating sampling, requiring authorization from land management agencies, requiring that entities must submit to a QA/QC field audit, etc.
- We have also drafted language to increase the number of samples required for assessing the *E. coli* criteria from 5 to 8 (these have not been released for public comment) with the Assessment Methodology and drafted language to increase the number of geometric means from one five sample geometric mean to two eight sample geometric means in two separate years.
- EPA's recommended criteria are based on a 30-day geometric mean, so we may get push back from them on these changes to the Methodology.
- Other actions the agency has taken to address *E. coli* impairments are the Categorical UAA for Recreation, changing the duration of the *E. coli* criteria in Chapter 1 from 30-days to 60-days, and requiring that the samples be spaced out across the entire duration of the criteria (i.e., samples previously needed to be 24 hours apart and now need to be spaced over the entire 30-day period, soon to be 60-day period). Additional requirements to the sampling frequency, within the 60-day time period, are also being explored.